

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Patent Application of:
John C. Harvey *et al.*

Appeal Number: 2007-1837

Application No.: 08/470,571

Filed: June 6, 1995

For: SIGNAL PROCESSING APPARATUS AND
METHODS

Confirmation No.: 7586

Art Unit: 2622

Examiner: David Louis OMETZ

REQUEST FOR REHEARING UNDER 37 C.F.R. § 41.52

MS Appeal Brief
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Madam:

On March 20, 2009, the Board of Patent Appeals and Interferences ("Board") issued a Decision on Appeal ("Decision") in this matter affirming the Examiner's rejection of claims 56-58, 60-63, 65-66, 73, 89, 90, 93, 100, 102, 107, 108, 187, 191, 192 and 195-196 under 35 U.S.C. 103(a) on the basis of certain references and reversing all other rejections.

Appellants submit this Request for Rehearing ("Request") pursuant to 37 C.F.R. § 41.52 only as to the rejection of independent application claims 93 and 187 and their applicable dependent claims (the "Subject Claims") because of the Board's improper construction of a claim term appearing in claims 93 and 187 that was the principal basis upon which the Examiner's rejection of the Subject Claims was affirmed.

STATEMENT OF THE ISSUE

The Subject Claims recite “outputting said video presentation to said user, said video presentation comprising, firstly, a video image and, secondly, a **coordinated display** using said generated image and said video image”. In a first instance, a user sees a video image and subsequently, in a second instance, the user sees a display of a generated image and the video image from the prior instance, coordinated together in a combined display.

This Request is limited to a single issue of claim interpretation: the meaning to be given to the term “**coordinated display**” (the “Disputed Term”) found in the Subject Claims. The Board, without ever ascribing any meaning to the Disputed Term, rejected the Subject Claims under 35 U.S.C. § 103(a) as unpatentable over Hedger and Sedman and either one of Yoshino or Bart (the “Combined References”). The Board’s entire analysis supporting the rejections of the Subject Claims is found at pages 67-86 of the Decision with the affirmance as to claim 93 being found at pages 81-84. Claim 187 is summarily addressed at page 86.

The Decision determined the sole issue to be: “Does the combination of references teach or suggest ‘outputting said video presentation . . . comprising . . . *a coordinated display using said generated image and said video image*’?” Decision at 83 (omissions and emphasis in original). The Board’s overly broad interpretation of “*a coordinated display using said generated image and said video image*” is outcome determinative to the Decision’s holding. Appellants urge that this remains the sole issue but that the Board should reconsider the conclusion provided in the Decision.

THE DECISION IGNORES

APPROPRIATE STANDARDS OF CLAIM CONSTRUCTION

The Board found that “‘a coordinated display *using* said generated images and said video image’ does not require that the information in the generated image and the video image are coordinated, but only requires that the ‘display’ is coordinated ‘using’ the images.” Decision at 24 (emphasis in original). Stated differently, the Board concluded “it is the display that is coordinated, not the display of the generated image

with the display of the video image” which renders the claim unpatentable over the Combined References. Decision at 84.

It is axiomatic that, in reviewing the Subject Claims, the Board must give them their “broadest reasonable interpretation” consistent with the specification, as they would be understood by a person of ordinary skill in the art. *In re Swanson*, 540 F.3d 1368, 88 U.S.P.Q.2d 1196 (Fed. Cir. 2008). Proper meaning of the claim term must be the “broadest reasonable” one and not one that is the broadest possible. Claim construction is not a purely academic exercise conducted in an informational vacuum to identify the broadest possible meaning to give a claim term—which Appellants suggest was done in the Decision. The specification’s guidance fills the vacuum and compels a different result.

Moreover, correct construction gives full meaning to every word of the entire claim, *In re Gabapentin Patent Litigation*, 503 F.3d 1254, 84 U.S.P.Q.2d 1651 (Fed. Cir. 2007), and because claim terms are generally given their ordinary and customary meaning, which is the meaning that the term would have to a person of ordinary skill in the art in question, claims therefore must be read in view of the specification of which they are a part. *Kyocera Wireless Corp. v. Int’l Trade Comm’n*, 545 F.3d 1340, 89 U.S.P.Q.2d 1057 (Fed. Cir. 2008)

Appellants contend that the Board erred in not determining that term “coordinated display” as used in the Subject Claims connotes a defined relationship between the video image and generated image, a combination of the images and the information they convey. Appellants urge that the Decision substantively reads the concept of “coordination” and “using” out of the claim and disregards all the standard claim interpretation tools that provide meaning to the Disputed Term. The Board’s construction simply is not reasonable in the context of the fundamental object of the invention as disclosed and described in the specification. Proper interpretation of the Disputed Term, *i.e.*, construing the term consistent with established principles of claim construction, distinguishes the Subject Claims from the Combined References and requires reversal of the rejection of the Subject Claims.

A. Decision Errs by Failing To Give Term “Coordinated Display” Meaning And Is Not Logical

The Decision asserts: “Claim 93 does not define the ‘coordinated display’ as requiring more than ‘using’ the two images” Decision at 84. In other words, according to the Board, at any time there is a generated image and a video image displayed together on a screen there is a “coordinated display” without regard to the content communicated by the images—an image of a koala bear alongside a graph of how the viewer’s fantasy baseball team performed would satisfy the Board’s interpretation of the Disputed Term.

The Board’s conclusion provides no independent [much less reasonable] meaning for the term “coordinated” since it does nothing more than give the words “coordinated” and “using” the very same meaning. Under the Board’s interpretation, whenever the images are used together, regardless of what they show, a “coordinated display” is created. This conflicts with the obligation to give each word in the claim its own meaning—especially when it is crystal clear that the inventor intended the words of the claim, “using” and “coordinated”, to convey different meanings. See, B., *infra*.

Moreover, common usage would require that, if the display of the Subject Claims required no more than using the two images at the same time (in any fashion), the claim limitation at issue should read, “a display consisting of said generated image and said video image.” This is simply not the claim language at issue. Rather, the Subject Claims use another word, an adjective modifying “display”, and recites a “coordinated display” which is constructed using the two images.

By equating “coordinated” and “using”, the Decision reads the claim word, “coordinated” completely out of the claim, which is plain error. “Coordinated” is included in the claim for a purpose and the Decision makes absolutely no effort to discern that purpose. “[C]laims are interpreted with an eye toward giving effect to all terms in the claim.” *Bicon Inc. v. Straumann Co.*, 441 F.3d 945, 78 U.S.P.Q.2d 1267, 1272 (Fed. Cir. 2006) (citing *Elekta Instrument S.A. v. O.U.R. Scientific Int’l Inc.*, 214 F.3d 1302, 1305, 54 U.S.P.Q.2d 1910, 1913 (Fed. Cir. 2000) (supporting claim construction by noting: “Any other conclusion renders the [claim] reference to 30° superfluous.”); *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 19 U.S.P.Q.2d 1500 (Fed. Cir. 1991); *In re*

Danly, 263 F.2d 844, 120 U.S.P.Q. 528 (C.C.P.A. 1959)); *see also In re Angstadt*, 537 F.2d 498, 501, 190 U.S.P.Q. 214,217 (C.C.P.A. 1976) (“We note at the outset that the claim limitation . . . must be given effect since we must give effect to all claim limitations.”); *Winter v. Fujita*, 53 U.S.P.Q.2d 1234, 1244 (Bd. Pat. App. & Inter. 1999) (“As a general proposition, we believe that it is appropriate, where possible, to assign some meaning to each word of a claim. Thus, like the words of a statute, each word in a claim should be given meaning if possible.”); *Ex Parte Maizel*, 27 U.S.P.Q.2d 1162, 1664 (Bd. Pat. App. & Inter. 1992) (“[E]very limitation positively recited in a claim must be given effect in order to determine what subject matter that claim defines.”)

Applying these principles to the Decision compels reconsideration of its rejection of the Subject Claims. Nowhere does the Decision define the scope and/or meaning of the term “coordinated display.” Rather, the Decision asserts what a “coordinated display” does not require and then only references the discussion of the appealed rejection to show how the remaining limitations regarding the recited display are met. Decision at 24. This is neither consistent with established principles of claim construction nor is it logical.

The Decision asserts: “it is the display that is coordinated, not the display of the generated image with the display of the video image.” Decision at 84. Appellants do not understand this statement and do not believe it to constitute an accurate definition of the limitation “coordinated display.” The display recited by Subject Claims is a “*display using said generated image and said video image*.” In accordance with a fair reading of the claim language, the recited display uses the two images together to advance the required coordination—it is the relationship between the combined presentation of the two images that provides the meaning to the viewer. Accordingly, the display using the generated image and the video image is coordinated on the basis of the information used to generate those images.

The Decision initially interprets “a coordinated display” as follows:

“[A] coordinated display *using* said generated image and said video image” does not require that the information in the generated image and the video image are coordinated, but only requires that the “display” is coordinated “using” the images. We agree with the Examiner’s interpretation

that this limitation is met by the display of generated teletext data images superimposed on a video image even though the images are unrelated to each other, as discussed in the rejection of claim 93 over Hedger and Sedman in view of either Yoshino or Bart.

Decision at 24. This claim interpretation of the Decision is improper and erroneous for several reasons.

As discussed above, the discussion in the Decision of the rejection of the Subject Claims over Hedger and Sedman in view of either Yoshino or Bart does not explain why a display of a generated teletext image superimposed on a video image is coordinated. Rather, as noted above, the discussion in the Decision baldly asserts that such a display of unrelated images meets the claim limitation without the required explanation of how this limitation is met by the disclosure of the references, either individually or collectively, and without consideration of the reasonableness of its conclusion in light of the specification.

Second, the Decision notes that the Subject Claims do “not require that the information in the generated image and video image are coordinated.” The Board’s statement is not entirely correct and, in fact, implies a condition which is not correct. The required coordination of the display does not necessarily require that information in the generated image and the video image be directly coordinated. In fact, such direct coordination may not be feasible as the underlying information is transformed in creating the coordinated display. The “coordinated display” limitation does require the information upon which the generated image and the video image are based be used to create the required coordination of the “coordinated display.” Contrary to the Board’s conclusion, the Subject Claims clearly recite the “coordinated” relationship which the generated image and the video image must have. The Subject Claims require that the “display” using the generated image and the video image be coordinated by reason of the steps through which the “coordinated display” is created. It is the coordinated presentation of the images that provides meaning and not merely their location on the simultaneous display—to find otherwise is not reasonable in the context of the entire claim.

Appellants submit that, by focusing on the issue of whether the “information” in the constituent images is required to be “coordinated,” the Board misconstrued a critical limitation of the Subject Claims. The “coordinated display” of the Subject Claims requires a defined relationship between the generated image and the video image. By focusing on the “information” of the image and not the scope of the “coordinated” limitation, the Board has fallen into error and failed to follow proper claim interpretation techniques. The specification explains how information of a “coordinated display” is conveyed. The information has particular meaning when “graphed on a particular graph with a particular origin and set of scaled graph axes.” Spec. p. 25, l. 1-6. In other words, the information of a graphic image only exists when it perceived in combination with the graph axes. Considering this fact, the Decision’s statement that the “information” in the generated image and the video image must be coordinated is an improper construction of the claim. The information of the generated image need not be coordinated with the video image. On the contrary, the generated image itself must be “coordinated” with the video image.

In the example from the specification, the display using the generated image of the line depicting the subscriber’s portfolio performance and the video image including the graph axes is coordinated so that the relationship between the line and the axes provides the proper information to the particular subscriber. Appellants fail to understand why the Decision attempts to distinguish the concept of coordinating “information” as opposed to providing patentable weight to the limitation, “a coordinated display using said generated image and said video image,” as the claim recites. The Decision is in error because it fails to give proper, if any, significance to the words of this limitation as they are recited.

The Decision asserts that, in the case of teletext data images superimposed on a video image, even though the images are unrelated to each other, the teletext image is displayed in a certain portion of the television screen with the television video in the background. Decision at 84. The Decision concludes that, even in the absence of a definable relationship between the two images, the teletext images are overlaid on the video images in “a spatially ‘coordinated’ fashion.” *Id.* The error in this conclusion is

that it renders the term “coordinated” in the recitation of “coordinated display” meaningless. As discussed above, any display using a first image and second image can be said to combine the images in “a spatially ‘coordinated’ fashion.”¹ The Decision allows for no difference between a “display” and a “coordinated display.” Only where the placement of the images used in a display is dependent on some definable relationship between the images does the term “coordinated” have meaning. Thus, properly interpreted, a “coordinated display” does require the presence of a definable relationship between the images used in the display. For the reasons discussed above, the claim term “coordinated” defines a key difference between the disclosed invention and the applied references.

B. Decision Errs by Ignoring the Fundamental Object of the Invention As Described in the Specification In Construing “Coordinated Display”

The Decision demonstrates a clear understanding of what the disclosed invention is and that there is a patentable distinction between the disclosed invention and the Combined References. The Decision recognizes that the applied art, including Bart and Yoshino, include no teaching or suggestion of a display on which any image superimposed on a video image is created through coordination between those two images when the term, “coordinated”, is given its normal meaning consistent with the fully and clearly disclosed fundamental object of the invention as described in the specification.

The Decision acknowledges that the “coordinated display” limitation corresponds to the “Wall Street Week” graph example disclosed in the specification

¹ The logic of the decision is not limited to simultaneous displays using multiple images. Appellants note that even where displays using multiple images display the images sequentially, each image must be displayed in certain location. Thus under the reasoning of the Decision even where images are not displayed simultaneously they could be still be said to be displayed in “a spatially ‘coordinated’ fashion.” Furthermore, using the logic of the Decision, a sequential presentation of multiple images could be said to be presented in a temporally “coordinated” fashion. The point is there will always be spatial or temporal relationships between multiple images used in a display. Where these relationships are derived solely from the fact the images are used in a common display there is no coordination. However, where these spatial and temporal relationships are dependent on some additional relationships between the images used, then the display may be said to be a coordinated display.

where a generated image overlays a video image to create a combined image.² Decision at 24. The specification describes how the “generated image” is created and how the “organized signal” and “user specific data” are combined to calculate and to create that “generated image.” The specification discloses a microcomputer that calculates the performance of a subscriber’s stock portfolio and constructs a graphic image of that performance at an installed graphics card. Spec. p. 24, l. 22 – p. 25, l. 8. This graphic image is information of a line that exists in a video RAM. Spec. p. 25, ll. 15-20. “Said information results from much computation, but the meaning of said information is hardly clear.” Spec. p. 25, ll. 20-22. Figure 1A, showing the stored graphic image, is just a line. Spec. p. 25, l. 22.

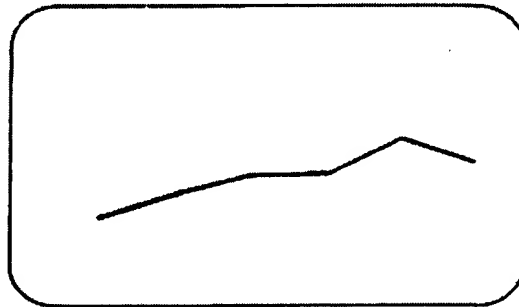


FIG. 1A

Spec. Fig. 1A. During a television program a studio generated graphic is transmitted and displayed on the television of the subscriber as shown in Figure 1B. Spec. p. 25, ll. 23-33.

² Coordinated displays disclosed in the specification are not limited to the “Wall Street Week” overlay of a generated image on a video image. Another example is a commercial in which a coordinated display includes a transmitted video image of a person pointing to the corner of the television screen and a locally generated image of a particular price of a service for the particular viewer located in the corner pointed to. Spec. p. 490, l. 10 – p. 491, l. 29. A further example is the display of generally applicable information of a crop planting plan combined with related locally generated specific crop planting plan information. Spec. p. 548, ll. 11-17 and p. 552, ll. 20-26.

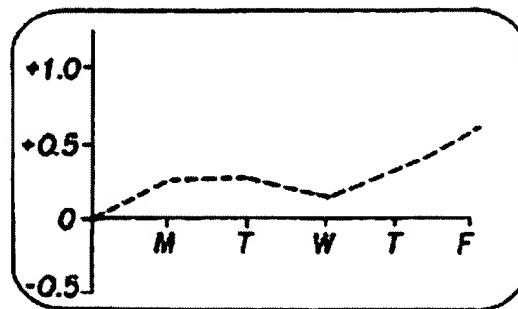


FIG. 1B

Spec. Fig. 1B. A signal instructs the microcomputer to overlay the graphic information from the graphics card onto received composite video to display the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic as shown in Figure 1C. Spec. p. 26, ll. 1-12.

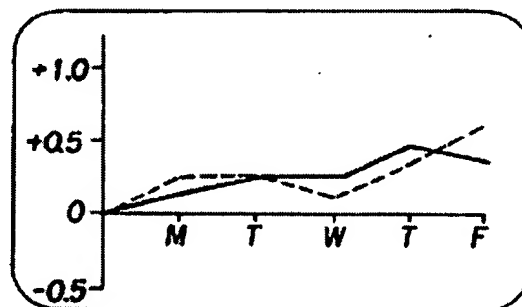


FIG. 1C

Spec. Fig. 1C. "By itself, the meaning of Fig. 1A is hardly clear. But when Fig. 1A is combined and displayed at the proper time with the conventional television information, its meaning becomes readily apparent. Simultaneously, each subscriber in a large audience of subscribers sees his own specific performance information as it relates to the performance information of the market as a whole." Spec. p. 26, ll. 13-19.

The Decision acknowledges a substantive difference between the disclosed coordinated display shown in Figure 1C of the specification and the superimposition of teletext data on unrelated video images. Decision at 84. The difference acknowledged in

the Decision is that the disclosed “generated image” of Figure 1A and the “video image” of Figure 1B have a defined relationship in the coordinated display of Figure 1C. *Id.* The Decision also recognizes that such a relationship is not present where teletext images are simply superimposed on the video image.

Nevertheless, the Board ignored its demonstrated understanding of the invention and the clear guidance of the specification and concluded that this fully disclosed relationship between the “generated image” and the “video image” is not defined properly or captured by the recited term, “coordinated display.”³ This conclusion is in direct conflict with the obligation to interpret claims consistent with the specification as it would be interpreted by a person of ordinary skill in the art. *In re Swanson*, supra. Anyone of ordinary skill reading the Subject Claims and the specification would understand, exactly as the Board did, what the invention is and, unlike the Board, conclude that the term “coordinated display” aptly captures the inventive concept. The relationship of the claim limitation to the objective of the invention determines claim scope. *Ormco Corp. v. Align Technology*, 498 F.3d 1307, 84 U.S.P.Q.2d 1146 (Fed. Cir. 2007). To accomplish this in the instant case requires only that the Board find that “coordinated” and “using” are present in the Subject Claims for a distinct, separate purpose. And they are.

³ The Decision implies that this conclusion is supported by the principle that “[d]uring patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.” Decision at 84 (quoting *In re Zletz*, 893 F.2d 319, 321, 13 U.S.P.Q. 1320, 1322 (Fed. Cir. 1989)). This implication is disingenuous for several reasons. This is not a case where the Board has recognized an ambiguity and explored the scope and breadth of the claim language. Rather, this is an instance where a claim term “coordinated” defines a recognized difference between the applied art and the disclosed invention, but the Board has failed to give the term any meaning. As noted in the Appeal Brief (at pages 16-18) and the Reply Brief (at pages 20-21) there has been extensive prosecution in this application during which Appellants have explored the scope and breadth of the claim language and have introduced appropriate amendments to clarify the scope of the claims. The Examiner has repeatedly acknowledged differences between the applied art and the disclosed invention. However, rather than suggest claim language that would capture these acknowledged differences, the Examiner has repeatedly failed to give amended claim terms any meaning whatsoever. Applicants simply do not understand what ambiguity exists in the term “coordinated display” or what further clarification is necessary to capture the recognized difference between the disclosed invention and the applied art.

C. Decision Errs By Failing to Find that the Term “Coordinated Display” Fairly Defines the Acknowledged Distinction Between the Disclosed Invention and the Applied Art.

For the reasons identified above, the recited limitation, “coordinated display” requires a definite and defined relationship or link between the images used in the display – otherwise the display would not be a “coordinated display,” but rather just a “display.” The relationship between the components of a “coordinated display” is not simply a spatial or temporal relationship “using” the images in the display. There will be a spatial or temporal relationship between any combined images used in a display. For a display to be coordinated, there must be an additional definable relationship between any combined images used in the display. Appellants submit that the term, “coordinated display,” is properly interpreted to mean a display where the images used in the display are displayed dependent on a defined relationship between the content of the images.

The term, “coordinated,” as applied to “display” in the claim language defines a patentable difference between the claimed invention and the applied art. For example, the “coordinated” display disclosed in Figure 1C is disclosed as having a specific defined relationship between the two “coordinated” images. In that circumstance, the generated image of the user’s portfolio performance is overlaid on the video image of the studio generated graphic in a specific relationship to present each subscriber an accurate presentation of the performance of his stock portfolio. Accordingly, the display using the generated image and the video image is a “coordinated” display.

No such relationship is demonstrated by the Board between the teletext data and a video image over which the teletext data is superimposed in any of the applied references. Accordingly, the display of teletext superimposed on video images as taught by the applied art is not a “coordinated” display.

D. CONCLUSION

The Decision errs by failing to give the claim term “coordinated” any independent meaning, much less the meaning that looking to the specification compels. It is simply not reasonable to read the Subject Claims in the context of the specification and conclude that a coordinated display occurs whenever a video image and a locally

generated image occupy a display at the same time without regard to any other relationship between the images. Appellants submit that for the reasons set forth above, the term “coordinated display” is properly interpreted to mean a display where the images used in the display are displayed dependent on a definable relationship between the content of the images, an interpretation well supported by logic, the purpose of the invention and the specification. The applied art merely teaches teletext data images superimposed on a video image. The applied art fails to teach or suggest that teletext data images superimposed on underlying video images are displayed dependent on a definable relationship between the content of teletext and the underlying video image. For this reason, the applied art fails to teach or suggest each limitation of Subject Claims, which includes a step of “outputting said video presentation to said user, said video presentation comprising, firstly, a video image and, secondly, *a coordinated display using said generated image and said video image.*” Appellants request that the rejection of the Subject Claims be reversed for at least this reason.

CLAIM 93 AND CLAIMS DEPENDENING THEREFROM

Claim 93 includes the step of “outputting said video presentation to said user, said video presentation comprising, firstly, a video image and, secondly, *a coordinated display using said generated image and said video image.*” The Decision affirming the rejection of claim 93 as being unpatentable under 35 U.S.C. § 103(a) over Hedger and Sedman in view of either Yoshino or Bart is in error for the reasons set forth above. Appellants request that the rejection of claim 93 be reversed.

The Decision affirms the rejections of claim 100, 102, 107 and 108 as being unpatentable under 35 U.S.C. § 103(a) over Hedger and Sedman in view of either Yoshino or Bart. Claims 100, 102, 107 and 108 depend from claim 93. These claims are thus patentable over the applied art for the reasons set forth above. Appellants request that the rejections of claims 100, 102, 107 and 108 be reversed.

CLAIM 187 AND CLAIMS DEPENDING THEREFROM

Claim 187 includes a step of “outputting said video presentation to said user based on said organized signal, said video presentation comprising, firstly, a video image

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and, secondly, *a coordinated display using said generated image and said video image.*" The rejection of claim 187 under 35 U.S.C. § 103(a) as being unpatentable over Hedger and Sedman in view of either Yoshino or Bart is affirmed for the same reasons as is claim 93. Decision at 86. The applied references fail to teach or suggest a "coordinated display" for the reasons set forth above. For at least this reason, appellants request that the rejection of claim 187 be reversed.

The Decision affirms the rejections of claims 191, 192, 195 and 196 as being unpatentable under 35 U.S.C. § 103(a) over Hedger and Sedman in view of either Yoshino or Bart. Claims 191, 192, 195 and 196 depend from claim 187. These claims are thus patentable over the applied art for the reasons set forth above with respect to claims 187 and 93. Appellants request that the rejections of claims 191, 192, 195 and 196 be reversed.

PRAYER

The affirmance of the rejections of claims 93, 100, 102, 107, 108, 187, 191, 192, 195 and 196 in the recent Board Decision is based on an erroneous interpretation of the claim term "coordinated display." Appellants respectfully request that the interpretation of the claim term "coordinated display" be reconsidered and that the rejections of these claims be reversed.

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Respectfully submitted,

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